

Amendments to the Claims

The listing of claims will replace the previous version, and the listing of claims:

Listing of Claims

1. (currently amended) An automatic lathe which has a tool post and a spindle configured to relatively move in a spindle axis line direction and which machines a material gripped by a chuck at ~~the~~ a tip of the spindle by ~~use of~~ a tool installed on the tool post, ~~the automatic lathe, characterized by~~ comprising:

a head stock configured to move forward and backward;

the spindle rotatably supported on the head stock and having a through-hole which allows a ~~the~~ rod-like material to be inserted therethrough;

the tool post equipped with the tool to machine the material gripped by the chuck of the spindle;

a guide bush support table disposed closer to a tip side of the spindle than the head stock;

support table fixing means for positioning and fixing the guide bush support table at a specified position on a bed;

a guide member which is rotatably supported on the guide bush support table and which is regulated so as not to move forward and backward with respect to the guide bush support table and in which a through-hole is formed so that the spindle is inserted therein;

a guide bush detachably fitted to a ~~the~~ tip of the guide member;

driving means provided in the guide bush support table to rotate the guide member together with the guide bush;

rotation transmission means for transmitting ~~the~~ rotation of the guide member to the spindle;

spindle moving means for moving the spindle forward and backward together with the head stock inside the guide member; and

spindle fixing means for preventing the spindle from moving forward and backward with respect to the guide bush support table, and positioning and fixing the spindle at a specified position on the guide bush support table when the guide bush is removed from the guide member.

2. (currently amended) The automatic lathe according to claim 1, wherein ~~characterized in that~~ a guide is provided to guide the forward and backward movement of the guide bush support table so that the guide bush support table is movable along the guide when ~~the~~ fixing of the guide bush support table by the support table fixing means is cancelled, and wherein ~~that~~ when the guide bush is removed to machine the material without using the guide bush, the material gripped by the chuck of the spindle is machined while the head stock and the guide bush support table are being integrally moved forward and backward.

3. (currently amended) The automatic lathe according to claim 1, wherein ~~characterized in that~~ the support table fixing means has a positioning member positioned and fixed on the bed, and a bolt coupling the positioning member to the guide bush support table.

4. (currently amended) The automatic lathe according to claim 3, wherein ~~characterized in that~~ a spacer with a specified width is placed between the positioning member and the guide bush support table so that the position of the guide bush or the tip of the spindle is adjustable when the guide bush is fitted or removed.

5. (currently amended) The automatic lathe according to claim 3, wherein ~~characterized in that~~ the positioning member is a tool post base which supports the tool post.

6. (currently amended) The automatic lathe according to claim 1, wherein characterized in that the rotation transmission means is an engaging member which engages with the spindle on the tip and terminal end sides of the guide member.

7. (currently amended) The automatic lathe according to claim 1, wherein characterized in that the rotation transmission means and the spindle fixing means have an attachment fitted and fixed to the guide member and the tip of the spindle after the guide bush is removed from the tip of the guide member, an engaging portion formed in an inner peripheral surface of the attachment, and an engaged portion formed in the spindle to be engaged with the engaging portion.

8. (currently amended) ~~The~~ An automatic lathe according to claim 1, ~~characterized in that~~ which has a tool post and a spindle configured to relatively move in a spindle axis line direction and which machines a material gripped by a chuck at a tip of the spindle by a tool installed on the tool post, comprising:

a head stock configured to move forward and backward;
the spindle rotatably supported on the head stock and having a through-hole which allows a rod-like material to be inserted therethrough;

the tool post equipped with the tool to machine the material gripped by the chuck of the spindle;

a guide bush support table disposed closer to a tip side of the spindle than the head stock;

support table fixing means for positioning and fixing the guide bush support table at a specified position on a bed;

a guide member which is rotatably supported on the guide bush support table and which is regulated so as not to move forward and

backward with respect to the guide bush support table and in which
a through-hole is formed so that the spindle is inserted therein;
a guide bush detachably fitted to a tip of the guide member;
driving means provided in the guide bush support table to
rotate the guide member together with the guide bush;
rotation transmission means for transmitting rotation of the
guide member to the spindle;
spindle moving means for moving the spindle forward and
backward together with the head stock inside the guide member; and
spindle fixing means for preventing the spindle from moving
forward and backward with respect to the guide bush support table,
and positioning and fixing the spindle at a specified position on
the guide bush support table when the guide bush is removed from
the guide member,
wherein the head stock is coupled to the guide bush support
table by coupling means when the guide bush is removed from the
guide member.

9. (currently amended) The automatic lathe according to claim 8,
wherein characterized in that a thermal expansion absorption member
which absorbs a dimensional change of the spindle due to thermal
expansion is provided in at least one place of the spindle.

10. (currently amended) The automatic lathe according to claim 9,
wherein characterized in that the thermal expansion absorption
member comprises regulating means for regulating the spindle so
that the spindle does not to move forward and backward with respect
to the head stock when the guide bush is fitted, and regulation
canceling means for canceling a the regulation of the spindle by
the regulating means when the guide bush is removed.

11. (currently amended) The automatic lathe according to claim 10, wherein ~~characterized in that~~ the regulating means comprises an engaging member which engages with the spindle in ~~the~~ front and rear on the spindle axis line, and a fitting member which fits the engaging member to the head stock so that the engaging member does not rotate with respect to the head stock and so that the engaging member has a gap of preset dimensions in the spindle axis line direction without separating from the head stock when the regulation of the spindle is cancelled by the regulation canceling means, and

the regulation canceling means is a fitting member which fits and fixes the engaging member onto the head stock.